

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEBRASKA

BRUCE McLAUGHLIN,

Plaintiff,

vs.

BNSF RAILWAY COMPANY,
formerly known as Burlington
Northern & Santa Fe Railway Co.

Defendant.

4:18-CV-3047

MEMORANDUM AND ORDER

Bruce McLaughlin is suing his former employer, BNSF Railway Co., under the Federal Employers Liability Act (FELA), [45 U.S.C. § 51](#) *et seq.*, alleging that his workplace exposure to hazardous materials caused his bladder and lung cancers. The Court previously dismissed McLaughlin's claim as to his bladder cancer, because it was time barred by FELA's 3-year statute of limitations. [Filing 59](#).

BNSF now moves to exclude the testimony of McLaughlin's industrial hygienist ([filing 66](#)) and medical causation expert ([filing 64](#)) and for summary judgment ([filing 62](#)). For the reasons below, BNSF's motion to exclude the expert testimony of McLaughlin's medical causation expert and its motion for summary judgment will be granted.

I. BACKGROUND

McLaughlin worked for BNSF in Lincoln, Nebraska for 39 years, starting in 1976. [Filing 37-1 at 4, 15](#). He started as a helper, but was quickly upgraded to a carman and held that position until he retired in March of 2015. [Filing 37-1 at 24-25, 15](#). McLaughlin worked about eight years in the Havelock Shops

and the remainder of his time at Hobson Yard. [Filing 37-1 at 23, 26](#). During that time he was exposed to various hazardous materials, including dust, welding fumes, diesel fuel, diesel exhaust, and insecticide. *See* [filing 37-1 at 23, 37-38](#); *see also* [filing 1 at 2](#). McLaughlin also smoked a pack-and-a-half of cigarettes a day for over 30 years until he quit in 2012. [Filing 37-1 at 9-10](#).

In 2015, McLaughlin was diagnosed with bladder cancer. [Filing 37-1 at 7-8](#); [filing 37-3 at 1](#). After a radiologic study of his chest in 2017, McLaughlin was diagnosed with lung cancer. [Filing 65-2 at 1](#); [filing 37-1 at 7](#). McLaughlin received treatment for both cancers and is now thankfully cancer-free, but experienced substantial changes to his health that continue to affect his daily life. *See* [filing 37-1 at 19-20](#).

During the course of this litigation, McLaughlin hired two experts to offer opinions regarding his claims. *See generally* [filing 65-2](#); [filing 67-1](#). Hernando R. Perez, Ph.D. is an industrial hygiene and occupational health expert who opined regarding McLaughlin's level of workplace exposure to toxins—in particular diesel exhaust and welding fumes. [Filing 67-1 at 1](#). Perez spoke with McLaughlin, reviewed McLaughlin's deposition testimony, and conducted a literature review. *See* [filing 67-1 at 1, 4, 23-24](#). Based on his evaluation, he opined that BNSF failed to supply McLaughlin with a reasonably safe place to work. [Filing 67-1 at 22](#).

Marc Wilkenfeld, M.D. offered causality opinions linking McLaughlin's workplace exposure to his bladder and lung cancer diagnoses. [Filing 65-2 at 1](#). Wilkenfeld reviewed McLaughlin's medical records, the complaint, McLaughlin's answers to BNSF's interrogatories, and McLaughlin's deposition. [Filing 65-2 at 1](#). He also conducted a literature review. *Id.* According to Wilkenfeld, McLaughlin had an increased lung cancer risk from diesel exhaust exposure independent of either an increased risk from smoking

cigarettes or increased risk from asbestos exposure.¹ [Filing 65-2 at 5](#). And Wilkenfeld opined that "the exposure to diesel exhaust and asbestos that Mr. McLaughlin experienced during his work for BNSF was a causative factor in the development of both his bladder and lung cancer." [Filing 65-2 at 5](#).

II. STANDARD OF REVIEW

Summary judgment is proper if the movant shows that there is no genuine dispute as to any material fact and that the movant is entitled to judgment as a matter of law. *See Fed. R. Civ. P. 56(a)*. The movant bears the initial responsibility of informing the Court of the basis for the motion, and must identify those portions of the record which the movant believes demonstrate the absence of a genuine issue of material fact. *Torgerson v. City of Rochester*, 643 F.3d 1031, 1042 (8th Cir. 2011) (en banc). If the movant does so, the nonmovant must respond by submitting evidentiary materials that set out specific facts showing that there is a genuine issue for trial. *Id.*

On a motion for summary judgment, facts must be viewed in the light most favorable to the nonmoving party only if there is a genuine dispute as to those facts. *Id.* Credibility determinations, the weighing of the evidence, and the drawing of legitimate inferences from the evidence are jury functions, not those of a judge. *Id.* But the nonmovant must do more than simply show that there is some metaphysical doubt as to the material facts. *Id.* In order to show that disputed facts are material, the party opposing summary judgment must cite to the relevant substantive law in identifying facts that might affect the outcome of the suit. *Quinn v. St. Louis Cty.*, 653 F.3d 745, 751 (8th Cir. 2011).

¹ After Perez and Wilkenfeld wrote their expert reports, the parties narrowed the issues in dispute to whether McLaughlin's exposure to diesel exhaust caused his lung cancer. Any alleged asbestos exposure is no longer relevant. *See filing 65-1 at 5-6*.

The mere existence of a scintilla of evidence in support of the nonmovant's position will be insufficient; there must be evidence on which the jury could conceivably find for the nonmovant. *Barber v. C1 Truck Driver Training, LLC*, 656 F.3d 782, 791-92 (8th Cir. 2011). Where the record taken as a whole could not lead a rational trier of fact to find for the nonmoving party, there is no genuine issue for trial. *Torgerson*, 643 F.3d at 1042.

III. DISCUSSION

FELA imposes upon employers a continuous duty to provide a reasonably safe place to work. *Cowden v. BNSF Ry. Co.*, 690 F.3d 884, 889 (8th Cir. 2012). FELA is to be liberally construed, but it is not a workers' compensation statute, and the basis of liability is "negligence, not the fact that injuries occur." *Consol. Rail Corp. v. Gottshall*, 512 U.S. 532, 543 (1994). So, McLaughlin must prove the customary common law elements of a negligence claim: duty, breach, foreseeability, and causation. *Crompton v. BNSF Ry. Co.*, 745 F.3d 292, 296 (7th Cir. 2014); *Tufariello v. Long Island R. Co.*, 458 F.3d 80, 87 (2d Cir. 2006). But the Court applies a relaxed standard of causation under FELA. *CSX Transp., Inc. v. McBride*, 564 U.S. 685, 692 (2011). The test is simply whether employer negligence played any part, even the slightest, in producing the injury for which damages are sought. *Id.*

Expert evidence is often required to establish the causal connection between the injury and alleged hazard "unless the connection is a kind that would be obvious to laymen, such as a broken leg from being struck by an automobile." *Brooks v. Union Pac. R.R. Co.*, 620 F.3d 896, 899 (8th Cir. 2010) (quoting *Moody v. Me. Cent. R.R. Co.*, 823 F.2d 693, 695 (1st Cir. 1987)). Because McLaughlin's lung cancer has no obvious origin, "expert testimony is necessary to establish even that small quantum of causation required by FELA." *Id.* (quoting *Claar v. Burlington N.R.R. Co.*, 29 F.3d 499, 504 (9th Cir.

1994)). And a plaintiff must prove not only that an alleged toxin is capable of causing an injury, but that the toxin caused this particular injury. *Myers v. Ill. Cent. R.R. Co.*, 629 F.3d 639, 643-44 (7th Cir. 2010); *Claar*, 29 F.3d at 504; see also *Edmonds v. Ill. Cent. Gulf R.R. Co.*, 910 F.2d 1284, 1288 (5th Cir. 1990) ("plaintiff must show more than a *possibility* that a causal relation existed"); *Mayhew v. Bell S.S. Co.*, 917 F.2d 961, 963 (6th Cir. 1990) (quoting *Moody*, 823 F.2d at 695) ("[A]lthough a [FELA] plaintiff need not make a showing that the employer's negligence was the *sole* cause, there must be a sufficient showing (i.e. *more than a possibility*) that a causal relation existed.").

The admissibility of expert testimony is governed by *Fed. R. Evid. 702*, which provides:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

Under Rule 702 the trial judge acts as a “gatekeeper” screening evidence for relevance and reliability. *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 589 (1993); *Polski v. Quigley Corp.*, 538 F.3d 836, 838-39 (8th Cir. 2008).

The objective of the *Daubert* inquiry is to make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field. *Am. Auto. Ins. Co. v. Omega Flex*,

Inc., 783 F.3d 720, 722 (8th Cir. 2015). And in order to be admissible, expert testimony must be both relevant to a material issue and reliable. *Daubert*, 509 U.S. at 591; *see also Margolies v. McCleary, Inc.*, 447 F.3d 1115, 1120 (8th Cir. 2006); *see Fed. R. Evid.* 702.

Daubert established a non-exhaustive checklist for trial courts to use in assessing the reliability of expert testimony, including whether the theory or technique can and has been tested, whether it has been subjected to peer review, whether there is a high known or potential rate of error, and whether the theory or technique enjoys general acceptance within a relevant scientific community. *See U.S. v. Holmes*, 751 F.3d 846, 850 (8th Cir. 2014) (citing *Daubert*, 509 U.S. at 592-94). And for the purposes of evaluating the relevance of expert testimony, the Court must determine whether the expert's reasoning or methodology was applied properly to the facts at issue. *Daubert*, 509 U.S. at 580. To that end, expert testimony that is speculative, unsupported by sufficient facts, or contrary to the facts of the case, is inadmissible. *Marmo v. Tyson Fresh Meats, Inc.*, 457 F.3d 748, 757 (8th Cir. 2006). A district court is not required to admit opinion evidence which is connected to existing data only by the *ipse dixit* of the expert. *General Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997). A court may conclude that there is simply too great an analytical gap between the data and the opinion proffered. *Id.*

McLaughlin dedicates lengthy portions of his briefs to how admissibility of expert testimony is affected by the FELA standard of causation. In particular, McLaughlin directs the Court to *Hines v. Consol. Rail Corp.*, 926 F.2d 262 (3d Cir. 1991). In *Hines*, the Third Circuit was presented with claims by a railroad worker, Hines, that his diseases were caused by exposure to polychlorinated biphenyls (PCBs). *Id.* at 264. The district court excluded the opinion of Hines' medical causation expert without opinion. *Id.* at 264-65. The

Third Circuit reversed and remanded, in part because the district court did not permit Hines sufficient opportunity, including an *in limine* hearing, to present his argument, but also because it believed the trial court had inappropriately applied the tests for admissibility of expert testimony. *Id.* at 265.

In reaching its decision, the Third Circuit focused on the relaxed standard of causation under FELA. *Id.* at 267. It explained that "a medical expert can testify that there was more than one potential cause of a plaintiff's condition." *Id.* at 268. The court relied on *Sentilles v. Inter-Caribbean Shipping Corp.*, 361 U.S. 107 (1959) which recognized "the general reluctance among experts to state that a trauma was the cause of a disease." *Hines*, 926 F.2d at 268-69. "[T]he matter does not turn on the use of a particular form of words by the physicians in giving their testimony,' since it is the task of the jury and not the medical witnesses to make a legal determination regarding causation." *Id.* at 269 (quoting *Sentilles*, 361 U.S. at 109). Ultimately, the *Hines* court held:

[T]he standard [of causation] under FELA can significantly influence a determination of the admissibility of [expert] testimony. By enacting FELA, Congress desired to "secure jury determinations in a larger proportion of cases than would be true of ordinary common law actions. Indeed, jury determinations were intended to be part of the FELA remedy.

Id. at 269 (internal citation omitted).

But *Hines* is hardly the last word on this issue. In fact, the Third Circuit revisited its decision in *Hines* three years later in *In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717 (3d Cir. 1994). There, the court explained:

It could be argued that, under *Hines*, the testimony of a doctor who engages in the traditional techniques of differential diagnosis is admissible regardless of whether he offers a plausible explanation of the conclusion he reaches. We admitted [the medical causation expert's] testimony because “even though [his] opinion [that PCBs caused plaintiff's illnesses] could be considered ‘novel,’ it appears that, under the *Downing* standard, his methods were not.” However, while we think that the standard techniques of differential diagnosis are reliable and will allow a doctor who employs them to testify to a novel conclusion, we also think that part of differential diagnosis is using these standard techniques to rule out alternative causes—thus, where a defendant points to a plausible alternative cause and the doctor offers no explanation for why he or she has concluded that was not the sole cause, that doctor's methodology is unreliable.

Id. at 759 n. 27. And the court held that such unreliable methodology would render an expert's opinion inadmissible. *Id.* at 760.

Having reviewed the relevant case law, the Court concludes that the admissibility of expert testimony under Rule 702 and *Daubert* is a distinct inquiry from the relaxed causation standard applied to FELA cases. *Wills v. Amerada Hess Corp.*, 379 F.3d 32, 47 (2d Cir. 2004); *Claar*, 29 F.3d at 503; see *In re Paoli*, 35 F.3d at 760. In other words, although McLaughlin need only prove that his exposure to diesel exhaust played any part in his development of lung cancer, see *McBride*, 564 U.S. at 692, he still must show that Perez and Wilkenfeld's reasoning and methodology were reliable and applied properly to the facts in this case. See *Daubert*, 509 U.S. at 590-91; *Margolies*, 447 F.3d at 1120; *In re Paoli* 35 F.3d at 758-60.

McLaughlin concedes that without Wilkenfeld's testimony to establish causation he cannot prove his case. [Filing 79 at 13 n. 2](#); *see also Brooks*, 620 F.3d at 899. So, the Court begins by analyzing the admissibility of Wilkenfeld's expert opinion. BNSF argues Wilkenfeld's causation opinion is unreliable and therefore inadmissible. According to BNSF, Wilkenfeld failed to (1) rely on sufficient facts and data, and (2) apply reliable principles or methods. [Filing 65 at 12, 15](#). The Court agrees.

Wilkenfeld did not rely on sufficient facts and data, says BNSF, because he relied exclusively on McLaughlin's deposition testimony to determine McLaughlin's level of diesel exhaust exposure. [Filing 65 at 14](#); *see also filing 65-2 at 1*. In his report, Wilkenfeld recounted McLaughlin's exposure from "work[ing] in close proximity to running locomotives in diesel pits," "climb[ing] into running locomotives," working in a diesel shop where "half the time diesel engines were running," and working inside trains that "reeked of diesel." [Filing 65-2 at 2](#). BNSF believes that Wilkenfeld should have reviewed McLaughlin's personnel file and work history that BNSF provided in discovery for "objective facts regarding Plaintiff's work environment." [Filing 65 at 14](#).

As a general rule, the factual basis of an expert opinion goes to the credibility of the testimony, not the admissibility, and it is up to the opposing party to examine the factual basis for the opinion in cross-examination. *Bonner v. ISP Techs, Inc.*, 259 F.3d 924, 929 (8th Cir. 2001). And where a medical expert has relied upon a patient's self-reported history and that history is found to be inaccurate, district courts usually should allow those inaccuracies to be explored through cross-examination. *Myers*, 629 F.3d at 645. Only if the expert's opinion is so fundamentally unsupported that it can offer no assistance to the jury must such testimony be excluded. *Bonner*, 259 F.3d at 930. BNSF therefore raises an issue—Wilkenfeld's reliance on McLaughlin's subjective

account of his workplace exposure—that implicates the foundation of Wilkenfeld's opinions and should ordinarily be explored through cross-examination.

But, that does not mean that Wilkenfeld relied on sufficient facts and data. The crux of the problem is not that Wilkenfeld relied solely on McLaughlin's own recollections, it is that Wilkenfeld cannot explain how the described exposure corresponds to a level of exposure that would cause lung cancer. In his deposition, Wilkenfeld testified:

Q: Dr. Wilkenfeld, in your review of literature on diesel exhaust and lung cancer, I understand from your report that you have reached the opinion that some level of exposure to diesel exhaust causes lung cancer; is that correct?

A: Correct.

Q: What is that level of exposure necessary to cause lung cancer?

A: I cannot tell you.

Q: Have there been quantitative studies on the amount or dose of diesel exhaust that is causally connected to lung cancer?

A: I don't know.

Q: What is the level of diesel exhaust to which the general population is exposed?

A: I don't know.

Filing 56-1 at 56.

Wilkenfeld cannot possibly link McLaughlin's alleged diesel exhaust exposure, whether derived from McLaughlin's subjective recollection or "objective" records, to his lung cancer if Wilkenfeld does not know what levels

of exposure have been shown to cause lung cancer. For example, the court can imagine a scenario where an expert, familiar with a toxin and a range of dangerous exposure levels, could analogize the work environment described by a plaintiff to other scenarios that produced lung cancer. But that is not what Wilkenfeld did. While raised by BNSF as an error in Wilkenfeld's methodology, the Court considers Wilkenfeld's lack of knowledge to be a deficiency in the facts and data Wilkenfeld needed to answer the question of whether McLaughlin's exposure caused his lung cancer. And testimony like Wilkenfeld's, that is speculative and unsupported by facts, is inadmissible. *See Marmo*, 457 F.3d at 757.

But Wilkenfeld also failed to use reliable principles or methods in arriving at his causation opinion. At his deposition, Wilkenfeld testified about his methodology. As previously mentioned, Wilkenfeld reviewed McLaughlin's medical records, deposition, and some court documents to become familiar with the case. *See Filing 65-2 at 1*. Then, Wilkenfeld did a PubMed search for scholarly articles using the terms diesel exhaust and either railway workers or railroad exposure. *Filing 65-1 at 43*. To narrow the results, Wilkenfeld selected only publications from peer review journals and decided whether they were relevant and strong studies. *Id.* Wilkenfeld did not use a formal criteria for evaluating the literature. *Filing 65-1 at 78*.

Ultimately, Wilkenfeld cited three studies to support the opinion that McLaughlin's diesel exhaust exposure was an independent cause of his lung cancer. *See filing 65-2 at 5*. Those studies each found an *increased risk* for lung cancer in workers exposed to diesel exhaust. *See filing 65-2 at 5*. But Wilkenfeld testified that none of the studies found a *causative* relationship between diesel exhaust and lung cancer. *Filing 65-1 at 99*. Wilkenfeld also admitted that two of the studies he relied on did not fully account for cigarette

smoking as a confounding factor. [Filing 65-2 at 91](#). At his deposition, Wilkenfeld fell back on publications from the American Cancer Society and International Agency for Research on Cancer (IARC) which determined, respectively, that diesel exhaust exposure has been linked to increased lung cancer death rates and is a causative factor for lung cancer.² [Filing 65-2 at 5](#).

Based on Wilkenfeld's report and deposition testimony, his opinion as to general causation is speculative at best. The only publication that Wilkenfeld can point to that says that diesel exhaust *causes* lung cancer, is from the IARC. And there is no indication in the record that the IARC determined what amount of diesel exhaust exposure causes lung cancer. *See* [filing 65-1 at 67-69, 88, 99](#). Furthermore, as previously explained, Wilkenfeld admitted that he does not have any idea what amount of exposure causes lung cancer. Thus, it is not clear to the Court that, in general, the type of exposure to diesel exhaust experienced by McLaughlin causes lung cancer.

Beyond that, Wilkenfeld's opinion regarding specific causation—that *McLaughlin's* diesel exhaust exposure caused *his* lung cancer—is wholly unsupported. BNSF argues that Wilkenfeld could neither describe nor define any methodology to form the basis for his opinion. [Filing 65 at 10](#). While Wilkenfeld did not testify to a specific methodology, McLaughlin suggests Wilkenfeld used differential etiology. [Filing 72 at 12](#). Giving McLaughlin and

² Wilkenfeld did not properly cite these two publications in his report. *See* [filing 65-2 at 5](#); [filing 65-1 at 67-69](#). BNSF argues that [Fed. R. Civ. P. 26](#) required citation and disclosure of the publications and that BNSF could not adequately depose Wilkenfeld on their contents, so Wilkenfeld should not be able to rely on them to support his opinion. *See* [Fed. R. Civ. P. 26\(a\)\(2\)\(B\)\(ii\)](#); [Filing 81 at 7](#). The Court does not reach this procedural issue, because even if Wilkenfeld could rely on the IARC and American Cancer Society publications Wilkenfeld cannot attribute *McLaughlin's* lung cancer to diesel exhaust exposure.

Wilkenfeld the benefit of the doubt, and assuming, for the sake of argument, that Wilkenfeld did use differential etiology, his opinion is still unreliable.³

The Court acknowledges that in the Eighth Circuit (and elsewhere) differential diagnosis and differential etiology are presumptively admissible. *Johnson v. Mead Johnson & Co., LLC*, 754 F.3d 557, 564 (8th Cir. 2014); *Turner v. Iowa Fire Equip. Co.*, 229 F.3d 1202, 1208 (8th Cir. 2000) ("Most circuits have held that a reliable differential diagnosis satisfies *Daubert* and provides a valid foundation for admitting an expert opinion."). In *Johnson*, the Eighth Circuit described differential etiology as the process of first "ruling in" the scientifically plausible causes and then "ruling out" the least plausible causes. 754 F.3d at 563.

The problem with Wilkenfeld's differential etiology is twofold. First, Wilkenfeld failed to adequately rule in diesel exhaust as a cause, however small, of McLaughlin's lung cancer. See *Brown v. Burlington N. Santa Fe Ry. Co.*, 765 F.3d 765, 774-75 (7th Cir. 2014); *Glastetter v. Novartis Pharm. Corp.*, 252 F.3d 986, 989 (8th Cir. 2001). Second, Wilkenfeld failed to adequately rule out cigarette smoking as the sole cause of McLaughlin's lung cancer. See *Brown*, 765 F.3d at 773-74; *In re Paoli*, 35 F.3d at 759.

As explained above, Wilkenfeld cannot explain how McLaughlin's described exposure corresponds to a level of exposure that would cause lung

³ There is some evidence in Wilkenfeld's report that he used a method similar to differential diagnosis or etiology, even if he did not say so explicitly. See [Filing 65-2 at 1](#). Wilkenfeld begins his report by listing a variety of risk factors associated with lung and bladder cancer (e.g. family history), and noting that McLaughlin did not have any of them except for smoking. *Id.*

cancer,⁴ and so has not reliably ruled it in. Wilkenfeld relied on the IARC's determination in 2012 that diesel exhaust causes lung cancer. But that is not enough to rule in diesel exhaust as a cause of McLaughlin's lung cancer, because Wilkenfeld does not know *how much* diesel exhaust exposure the IARC found to cause lung cancer.

Wilkenfeld's deposition testimony is instructive on this issue. When pressed on his methodology, Wilkenfeld said:

Q: Do you have a rule of thumb with regard to the necessary relative risk to make a causal connection between a substance and a medical disease?

A: Again, the determination is not based on a relative risk for one setting.

Q: Well surely you look at meta-analysis. Surely you look at various types of literature. And when you do so and you look at varying relative risk, is there a number that as a rule of thumb you require?

A: Well, you know—let me try to answer your question, if I can. I'll give you diesel exhaust as an example. So IARC in 2012 determined that exposure to diesel exhaust is a causative factor for lung cancer. The American Cancer Society notes that workers with exposure to diesel exhaust such as railroad workers have been found to have higher lung cancer death rates than unexposed workers.

⁴ Wilkenfeld also admitted that he did not review Perez's report on McLaughlin's occupational exposures prior to rendering his opinion in this case. [Filing 65-1 at 8](#). So, even if it were appropriate for Wilkenfeld to rely on Perez's opinion, he did not.

Now, if you show me studies that say that the relative risk was only 1.45, right, and [sic] those exposed to diesel, it wouldn't be very responsible of me to tell a patient that you can be exposed to diesel exhaust without raising your risk of lung cancer because these two international and national organizations have said clearly, right, that the exposure causes the cancer.

So from a patient care point of view and from a public health point of view, the answer to your question would be no. The answer to your question is the determination as to whether a substance causes cancer or is dangerous for someone to be exposed to is based on a variety of factors that you review.

[Filing 65-1 at 52-53.](#)

So, Wilkenfeld can say with certainty that diesel exhaust exposure may raise your risk for lung cancer, and that he would advise a patient of that increased risk. But Wilkenfeld cannot say that McLaughlin was exposed to enough diesel exhaust while working for BNSF that it was likely a cause of his lung cancer. Nor did he explain the "variety of factors" that may have also played a role in his opinion. [See filing 65-2 at 5.](#) To be clear, the Court is not looking for a causation opinion that can say with mathematical certainty the exact level of exposure necessary to cause lung cancer. Nor does the Court expect Wilkenfeld to have a precise measure of the amount of diesel exhaust McLaughlin inhaled during his work for BNSF. But in order to pass muster under *Daubert*, Wilkenfeld must be able to say more than "McLaughlin was exposed to diesel exhaust; some unknown amount of diesel exhaust can cause cancer; therefore exposure to diesel exhaust caused McLaughlin's lung cancer." This is just the type of opinion that is connected to the data only by the *ipse dixit* of the expert, and need not be accepted by the Court. [See *Joiner*, 522 U.S.](#)

at 146. And even under FELA, where diesel exhaust need not be a significant cause, but may merely play any part in McLaughlin's development of lung cancer, Wilkenfeld has not reliably ruled in McLaughlin's exposure. See *Brown*, 765 F.3d at 774-75; *Glastetter*, 252 F.3d at 989; *In re Paoli*, 35 F.3d at 758-60.

Wilkenfeld also failed to adequately rule out smoking as the sole cause of McLaughlin's lung cancer. The Court understands that cigarette smoking and diesel exhaust each *can be a* cause of lung cancer, but when smoking is raised by the defendant as a possible sole cause, differential etiology requires a medical professional to rule that possibility out. *Brown*, 765 F.3d at 773-74; *In re Paoli*, 35 F.3d at 760.

Wilkenfeld acknowledged that McLaughlin smoked one pack of cigarettes per day from age 16 until the year 2012, amounting to a 40-year period. *Filing 65-2 at 1*; see *filing 65-1 at 59-60*. And there is evidence in the record that suggests McLaughlin smoked closer to a pack-and-a-half per day during that time. *Filing 37-1 at 10*. In his deposition, Wilkenfeld explained that the risk of developing lung cancer is 10 or 11 times greater for smokers than non-smokers. *Filing 65-1 at 64-65*. The studies he cited for the relative risk attributed to diesel exhaust, independent of smoking, indicate exposed individuals are 44 percent to 47 percent more likely to develop lung cancer than unexposed individuals. *Filing 65-2 at 5*. Considering this information, there is a plausible argument that cigarette smoking was the sole cause of McLaughlin's lung cancer, which BNSF raises. See *filing 65 at 5*.

Without understanding the level of diesel exhaust exposure that causes lung cancer, Wilkenfeld did not meaningfully consider whether McLaughlin's exposure levels were high enough to have caused his lung cancer independent of his long smoking history. And Wilkenfeld also admitted he cannot say and

did not research the likely level of exposure McLaughlin actually experienced. [Filing 65-1 at 57-58](#). The best evidence before the Court that diesel exhaust exposure increases the risk of lung cancer independent of smoking is Lipsett and Campleman (1999), upon which Wilkenfeld relied.⁵ See [filing 65-2 at 5](#). Again, Wilkenfeld did not identify what degree of exposure increased a person's risk for developing lung cancer among smokers, nor did he explain how that related to McLaughlin's exposure levels. Wilkenfeld also failed to relate this study to McLaughlin's smoking history, which may or may not be similar to the subjects of the study. And Wilkenfeld admitted that Lipsett and Campleman, a meta-analysis, would include the limitations of the underlying studies that may not have adequately accounted for confounding factors. [Filing 65-1 at 91-92](#).

Ultimately, Wilkenfeld did not reliably rule out McLaughlin's 40-year smoking history as the sole cause of his lung cancer. So, the Court is not in a position to admit Wilkenfeld's opinion. See [Joiner](#), 522 U.S. at 146; [Brown](#), 765 F.3d at 773-74.

McLaughlin suggests that even if Wilkenfeld did not apply the rule in/rule out method reliably, that his opinion would still be admissible, relying on [Roohbaksh v. Bd. of Trs. of the Neb. State Colleges](#), 8:17CV31, 2019 WL 5653448 (D. Neb. Oct. 31, 2019). [Filing 72 at 13](#). *Roohbaksh* is a case about the admissibility of expert testimony concerning a college's compliance with the requirements of Title IX of the Education Amendments of 1972, and is factually

⁵ Wilkenfeld cites Michael Lipsett & Susan Campleman, *Occupational Exposure to Diesel Exhaust and Lung Cancer: A Meta-Analysis*, 89.7 Am. J. Pub. Health 1009 (1999) in his report. [Filing 65-2 at 5](#). And he testified at his deposition that this is the only study he relied on that may have adequately accounted for smoking and other confounding factors. [Filing 65-1 at 91-93](#).

very different from the case at hand. *See id.* at *1. And while *Roohbaksh* does recite the proposition that a differential diagnosis may be reliable with less than full information, McLaughlin takes that statement out of context. *See id.* at *7 (quoting *Johnson*, 754 F.3d at 564). *Roohbaksh* stands for the accepted principle that a *proper* differential diagnosis may be based on physical examinations, the taking of medical histories, and review of clinical tests, but that a doctor need not employ all of those techniques. *Id.* If the parties were only arguing about how Wilkenfeld gathered information about McLaughlin's work and medical history, then *Roohbaksh* would be on point. However, the Court is not persuaded by Wilkenfeld's method for establishing causation *after* he collected that information.

Daubert's standard of reliability "extends to each step in an expert's analysis all the way through the step that connects the work of the expert to the particular case." *In re Paoli*, 35 F.3d at 743. And as explained above, Wilkenfeld does not reliably connect the scientific data to the facts in this case.

IV. CONCLUSION

The Court's determination that Wilkenfeld's opinion is unreliable and should therefore be excluded renders BNSF's motion to exclude the expert testimony of Perez moot. So that motion will be denied as such. And as previously noted, McLaughlin concedes that the viability of his claim depends on Wilkenfeld's inadmissible testimony. Accordingly, the Court will grant BNSF's motion for summary judgment.

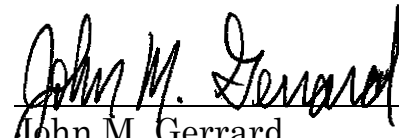
IT IS ORDERED:

1. BNSF's motion to exclude the expert testimony of Mark Wilkenfeld, M.D. ([filing 64](#)) is granted.

2. BNSF's motion for summary judgment ([filing 62](#)) is granted.
3. BNSF's motion to exclude the expert testimony of Hernando Perez, Ph.D. ([filing 66](#)) is denied as moot.
4. A separate judgment will be entered.

Dated this 11th day of February, 2020.

BY THE COURT:



John M. Gerrard
Chief United States District Judge